List of Contents

		NUMBER 1
Giuseppe Bruno, Michel Gendreau and Gilbert Laporte	1	A heuristic for the location of a rapid transit line
Tore Grünert, Stefan Irnich, HJ. Zimmermann, Markus Schneider and Burkhard Wulfhorst	13	Finding all k -cliques in k -partite graphs, an application in textile engineering
I-Ming Chao	33	A tabu search method for the truck and trailer routing problem
Elham Ghashghai and Ronald L. Rardin	53	Using a hybrid of exact and genetic algorithms to design survivable networks
S. Salhi	67	Defining tabu list size and aspiration criterion within tabu search methods
M.M. Ali, A. Törn and S. Viitanen	87	A direct search variant of the simulated annealing algorithm for optimization involving continuous variables
		NUMBER 2
Ming-Guang Huang, Pao- Long Chang and YC. Chou	103	Buffer allocation in flow-shop-type production systems with general arrival and service patterns
Jatinder N.D. Gupta, Karsten Hennig and Frank Werner	123	Local search heuristics for two-stage flow shop problems with secondary criterion
K. Steinhöfel, A. Albrecht and C.K. Wong	151	Fast parallel heuristics for the job shop scheduling problem
Yongwon Seo, Sungwon Jung and Juho Hahm	171	Optimal reorder decision utilizing centralized stock information in a two-echelon distribution system
Hsing Luh and RayTsaih	195	An efficient search direction for linear programming problems
		NUMBER 3
Norman D. Curet, Jason DeVinney and Matthew E. Gaston	205	An efficient network flow code for finding all minimum cost <i>s-t</i> cutsets
Gue-woong Jeong, Kyungsik Lee, Sungsoo Park and Kyungchul Park	221	A branch-and-price algorithm for the Steiner tree packing problem
Christos Valouxis and Efthymios Housos	243	Combined bus and driver scheduling
Richard Y.K. Fung, Jiafu Tang and Dingwei Wang	261	Extension of a hybrid Genetic Algorithm for nonlinear programming problems with equality and inequality constraints
Chang Sup Sung and Young Hwan Kim	275	Minimizing makespan in a two-machine flowshop with dynamic arrivals allowed

Andrew Wirth solvable cases and heuristics **NUMBER 4** Tongryeol Seol and Solving linear systems in interior-point methods 317 Soondal Park Indranil Bose and Raktim Pal Average waiting time of customers in a priority M/D/k 327 queue with finite buffers S. Yan, T.-T. Tung and Y.-P. Tu 341 Optimal construction of airline individual crew pairings Roberto Baldacci, Eleni 365 A new method for solving capacitated location problems Hadiiconstantinou, Vittorio based on a set partitioning approach Maniezzo and Aristide Mingozzi Mohamed A. Ahmed and 387 Simulation-based optimization using simulated annealing Talal M. Alkhamis with ranking and selection K. Raiashree Kamath and 03 A Bayesian approach to a dynamic inventory model T.P.M. Pakkala under an unknown demand distribution **NUMBER 5** Lawrence M. Leemis 423 Computing the nonparametric estimator of the survivor function when all observations are either leftor right-censored with tied observation times So Young Sohn 433 Robust design of server capability in M/M/1 queues with both partly random arrival and service rates Francis J. Vasko, Robert 441 The cable trench problem: combining the shortest path S. Barbieri, Brian Q. Rieksts, and minimum spanning tree problems Kenneth L. Reitmeyer and Kenneth L. Stott Moshe Eben-Chaime, 459 Capacitated location-allocation problems on a line Abraham Mehrez and Gad Markovich Liang-Yuh Ouyang and 471 A minimax distribution free procedure for mixed inventory model involving variable lead time with fuzzy demand Jing-Shing Yao Yi-Kuang Chen, Shih-Wei 489 An efficient two-staged approach for generating block Lin and Shuo-Yan Chou layouts Kurt M. Bretthauer and 505 A pegging algorithm for the nonlinear resource allocation **Bala Shetty** problem Jeffery K. Cochran and 529 Computing small-fleet aircraft availabilities including Theodore P. Lewis redundancy and spares **NUMBER 6** Richard L. Church 541 Geographical information systems and location science Oded Berman and 563 The generalized maximal covering location problem **Dmitry Krass** Vedat Verter 583 An integrated model for facility location and technology acquisition

295

Scheduling parallel machines with a single server: some

Amir H. Abdekhodaee and

Nicoletta Ricciardi, Roberto Tadei and Andrea Grosso	593	Optimal facility location with random throughput costs
J. Fernández, P. Fernández and B. Pelegrin	609	Estimating actual distances by norm functions: a comparison between the $I_{k,p,\theta}$ -norm and the $I_{b_1,b_2,\theta}$ -norm and a study about the selection of the data set
J. Brimberg and G.O. Wesolowsky	625	Locating facilities by minimax relative to closest points of demand areas
Zvi Drezner, Stefan Steiner and George O. Wesolowsky	637	On the circle closest to a set of points
Luce Brotcorne, Gilbert Laporte and Frédéric Semet	651	Fast heuristics for large scale covering-location problems
Steven J. D'Amico, Shoou- Jiun Wang, Rajan Batta and Christopher M. Rump	667	A simulated annealing approach to police district design
Soou-Jiun Wang, Joyendu Bhadury and Rakesh Nagi	685	Supply facility and input/output point locations in the presence of barriers
Rex K. Kincaid and Sharon L. Padula	701	D-optimal designs for sensor and actuator locations
Gabriela Mayer and Bernd Wagner	715	HubLocator: an exact solution method for the multiple allocation hub location problem
Gilbert Laporte, Juan A. Mesa and Francisco A. Ortega	741	Locating stations on rapid transit lines
Jorge H. Jaramillo, Joy Bhadury and Rajan Batta	761	On the use of genetic algorithms to solve location problems
		NUMBER 7
Zhi-Long Chen, Shanling Li and Devanath Tirupati	781	A scenario-based stochastic programming approach for technology and capacity planning
Lionel Dupont and Clarisse Dhaenens-Flipo	807	Minimizing the makespan on a batch machine with non-identical job sizes: an exact procedure
Krzysztof Fleszar and Khalil S. Hindi	821	New heuristics for one-dimensional bin-packing
Kunihiko Hiraishi, Eugene Levner and Milan Vlach	841	Scheduling of parallel identical machines to maximize the weighted number of just-in-time jobs
Chat Srivaree-ratana, Abdullah Konak and Alice E. Smith	849	Estimation of all-terminal network reliability using an artificial neural network
Jason Chao-Hsien Pan, JS. Chen and CM. Chao	869	Minimizing tardiness in a two-machine flow-shop
Angel Corberán, Rafael Martí, Eulalia Martínez and David Soler	887	The Rural Postman Problem on mixed graphs with turn penalties
Chu-Fu Wang, Chun-Teng Liang and Rong-Hong Jan	905	Heuristic algorithms for packing of multiple-group multi- casting
Ram Alvarez-Valdés, Antonio Parajón and Jos Tamarit	925	A tabu search algorithm for large-scale guillotine (un) - constrained two-dimensional cutting problems

		NONDENO
Bruce Curry, Peter Morgan and Mick Silver	951	Neural networks and non-linear statistical methods: an application to the modelling of price-quality relationships
Ali Allahverdi and Fawaz S. Al-Anzi	971	Using two-machine flowshop with maximum lateness objective to model multimedia data objects scheduling problem for WWW applications
C.S. Sung, Y.I. Choung, J.M. Hong and Y.H. Kim	995	Minimizing makespan on a single burn-in oven with job families and dynamic job arrivals
Youngshin Park, Sooyoung Kim and Chi-Hyuck Jun	1009	Mean value analysis of re-entrant line with batch machines and multi-class jobs
J.S. Finan and W.J. Hurley	1025	The analytic hierarchy process: can wash criteria be ignored?
Clark D. Jeffries	1031	Design rules for application specific dynamical systems
Gordian Schilling and Michael C. Georgiadis	1041	An algorithm for the determination of optimal cutting patterns
M. Selim Akturk and Siraceddin Onen	1059	Dynamic lot sizing and tool management in automated manufacturing systems
Herbert F. Lewis and Susan A. Slotnick	1081	Multi-period job selection: planning work loads to maximize profit
Sung A Cho, Chae-Bogk Kim and Dong Hoon Lee	1099	Single machine $\mathrm{MAD}/T_{\mathrm{max}}$ problem with a common due date
		NUMBER 9
F.J. Arcelus, T.P.M. Pakkala and G. Srinivasan	1115	A myopic policy for the gradual obsolescence problem with price-dependent demand
Jacques Renaud, Fayez F. Boctor and Gilbert Laporte	1129	Perturbation heuristics for the pickup and delivery traveling salesman problem
Eugene J. Zak	1143	Row and column generation technique for a multistage cutting stock problem
Chae Y. Lee and Hee K. Cho	1157	Port partitioning and dynamic queueing for IP forwarding
Siddhartha S. Syam	1173	A model and methodologies for the location problem with logistical components
Konstantin Kogan and Sheldon X.C. Lou	1195	Scheduling one-part-type serial manufacturing system under periodic demand: a solvable case
Miro Gradišar, Gortan Resinovič and Miroljub Kljajić	1207	Evaluation of algorithms for one-dimensional cutting
Mauricio Solar, V Parada and Rodrigo Urrutia	1221	A parallel genetic algorithm to solve the set-covering problem
Jaques Reifman and Earl E. Feldman	1237	Multilayer perceptron for nonlinear programming
Ching-Fang Liaw, CY. Cheng and Mingchih Chen	1251	The total completion time open shop scheduling problem with a given sequence of jobs on one machine
Kyung Sang Lee, Kyung Sam Park and Soung Hie Kim	1267	Dominance, potential optimality, imprecise information, and hierarchical structure in multi-criteria analysis
	1283	Call for Papers

		NOWBENTO
William G. Ferrell Jr. and Aman Chhoker	1283	Design of economically optimal acceptance sampling plans with inspection error
SH. Yoon and Jose A. Ventura	1301	Minimizing the mean weighted absolute deviation from due dates in lot-streaming flow shop scheduling
K.E. Rosing and M. John Hodgson	1317	Heuristic concentration for the p -median: an example demonstrating how and why it works
U.C. Gupta and V. Goswami	1331	Performance analysis of finite buffer discrete-time queue with bulk service
Giuseppe Paletta	1343	The period traveling salesman problem: a new heuristic algorithm
Marcos Escobar, Amedeo R. Odoni and Emily Roth	1353	Approximate solution for multi-server queueing systems with Erlangian service times
Anito Joseph	1375	A concurrent processing framework for the set partitioning problem
Tai-Hsi Wu, Chinyao Low and JW. Bai	1393	Heuristic solutions to multi-depot location-routing problems
Jatinder N.D. Gupta, Karin Krüger, Volker Lauff, Frank Werner and Yuri N. Sotskov	1417	Heuristics for hybrid flow shops with controllable processing times and assignable due dates
Short Communication		
Edward Yu-Hsien Lin and Dennis L. Bricker	1441	Connecting special ordered inequalities and transforma- tion and reformulation technique in multiple choice pro- gramming
		NUMBER 11
JiafuTang, Richard Y.K. Fung, Baodong Xu and Dingvvei Wang	1447	A new approach to quality function deployment planning with financial consideration
Joseph Kreimer	1465	Real-time system with homogeneous servers and nonidentical channels in steady-state
R.J. Kuo, L.M. Ho and C.M. Hu	1475	Integration of self-organizing feature map and $\it K$ -means algorithm for market segmentation
Jing-Shing Yao and Teng-San Shih	1495	Fuzzy revenue for fuzzy demand quantity based on interval-valued fuzzy sets
R. Caballero, T. Gómez, M. Luque, F. Miguel and F. Ruiz	1537	Hierarchical generation of Pareto optimal solutions in large-scale multiobjective systems
Shangyao Yan and Chich-Hwang Tseng	1559	A passenger demand model for airline flight scheduling and fleet routing
Amy Hing Ling Lau and HS. Lau	1583	The effects of reducing demand uncertainty in a manufacturer-retailer channel for single-period products
S. Raff	1603	Editorial
Din-Horng Yeh	1605	A note on "a simple heuristic for maximizing service of carousel storage"
Elkafi Hassini	1609	Comments on a note by Jacobs, Peck and Davis

A. Krishnamoorthy and T.G. Deepak	1611	Modified N -policy for $M/G/1$ queues
Cheng-Shuo Wang and Reha Uzsoy	1621	A genetic algorithm to minimize maximum lateness on a batch processing machine
Ko-Hsin Liang, Xin Yao, Charles Newton and David Hoffman	1641	A new evolutionary approach to cutting stock problems with and without contiguity
Yong Kyoon Lee, Kyung Sam Park and Soung Hie Kim	1661	Identification of inefficiencies in an additive model based IDEA (imprecise data envelopment analysis)
Salvador Nieto Sanchez, Evangelos Triantaphyllou, Jianhua Chen and T. Warren Liao	1677	An incremental learning algorithm for constructing Boolean functions from positive and negative examples
Liang-Yuh Ouyang, Cheng- Kang Chen and Hung-Chi Chang	1701	Quality improvement, setup cost and lead-time reductions in lot size reorder point models with an imperfect production process
Ue-Pyng Wen, Tsung-Lin Wu and Ching-Chir Shyur	1719	Bi-directional self-healing ring network planning
M.J. Lopez-Herrero	1739	On the number of customers served in the $M/G/1$ retrial queue: first moments and maximum entropy approach
Alexandre Linhares and Horacio Hideki Yanasse	1759	Connections between cutting-pattern sequencing, VLSI design, and flexible machines
		NUMBER 13
Walter J. Gutjahr and Gabriele Uchida	1773	NUMBER 13 A branch-and-bound approach to the optimization of redundant software under failure correlation
•	1773 1793	A branch-and-bound approach to the optimization of
Gabriele Uchida Jaehyun Yeo, Heesoo Lee		A branch-and-bound approach to the optimization of redundant software under failure correlation An efficient broadcast scheduling algorithm for TDMA
Gabriele Uchida Jaehyun Yeo, Heesoo Lee and Sehun Kim	1793	A branch-and-bound approach to the optimization of redundant software under failure correlation An efficient broadcast scheduling algorithm for TDMA ad-hoc networks
Gabriele Uchida Jaehyun Yeo, Heesoo Lee and Sehun Kim Chung-Chi Hsieh	1793 1807	A branch-and-bound approach to the optimization of redundant software under failure correlation An efficient broadcast scheduling algorithm for TDMA ad-hoc networks Smoothness in frame reduction On inventory replenishment with non-linear increasing
Gabriele Uchida Jaehyun Yeo, Heesoo Lee and Sehun Kim Chung-Chi Hsieh Sheng-Pen Wang Peter Chu and Patrick S.	1793 1807 1819	A branch-and-bound approach to the optimization of redundant software under failure correlation An efficient broadcast scheduling algorithm for TDMA ad-hoc networks Smoothness in frame reduction On inventory replenishment with non-linear increasing demand A note on inventory replenishment policies for deteriorat-
Gabriele Uchida Jaehyun Yeo, Heesoo Lee and Sehun Kim Chung-Chi Hsieh Sheng-Pen Wang Peter Chu and Patrick S. Chen	1793 1807 1819 1827	A branch-and-bound approach to the optimization of redundant software under failure correlation An efficient broadcast scheduling algorithm for TDMA ad-hoc networks Smoothness in frame reduction On inventory replenishment with non-linear increasing demand A note on inventory replenishment policies for deteriorating items in an exponentially declining market
Gabriele Uchida Jaehyun Yeo, Heesoo Lee and Sehun Kim Chung-Chi Hsieh Sheng-Pen Wang Peter Chu and Patrick S. Chen Wei-Chang Yeh Matthew J. Katz, Klara	1793 1807 1819 1827 1843	A branch-and-bound approach to the optimization of redundant software under failure correlation An efficient broadcast scheduling algorithm for TDMA ad-hoc networks Smoothness in frame reduction On inventory replenishment with non-linear increasing demand A note on inventory replenishment policies for deteriorating items in an exponentially declining market Search for all d-Mincuts of a limited-flow network
Gabriele Uchida Jaehyun Yeo, Heesoo Lee and Sehun Kim Chung-Chi Hsieh Sheng-Pen Wang Peter Chu and Patrick S. Chen Wei-Chang Yeh Matthew J. Katz, Klara Kedem and Michael Segal Anant Singh Jain and Sheik	1793 1807 1819 1827 1843 1859	A branch-and-bound approach to the optimization of redundant software under failure correlation An efficient broadcast scheduling algorithm for TDMA ad-hoc networks Smoothness in frame reduction On inventory replenishment with non-linear increasing demand A note on inventory replenishment policies for deteriorating items in an exponentially declining market Search for all d-Mincuts of a limited-flow network Improved algorithms for placing undesirable facilities A multi-level hybrid framework applied to the general
Gabriele Uchida Jaehyun Yeo, Heesoo Lee and Sehun Kim Chung-Chi Hsieh Sheng-Pen Wang Peter Chu and Patrick S. Chen Wei-Chang Yeh Matthew J. Katz, Klara Kedem and Michael Segal Anant Singh Jain and Sheik Meeran Gianpaolo Ghiani, Francesca Guerriero and Roberto Mus-	1793 1807 1819 1827 1843 1859	A branch-and-bound approach to the optimization of redundant software under failure correlation An efficient broadcast scheduling algorithm for TDMA ad-hoc networks Smoothness in frame reduction On inventory replenishment with non-linear increasing demand A note on inventory replenishment policies for deteriorating items in an exponentially declining market Search for all d-Mincuts of a limited-flow network Improved algorithms for placing undesirable facilities A multi-level hybrid framework applied to the general flow-shop scheduling problem The capacitated plant location problem with multiple

Yi-Kuei Lin

1927 Two-commodity reliability evaluation for a stochasticflow network with node failure

Gautam Choudhury	1941	A batch arrival queue with a vacation time under single vacation policy
T.C.E. Cheng, ZL. Chen and N.V. Shakhlevich	1957	Common due date assignment and scheduling with ready times
Chian-Son Yu	1969	A GP-AHP method for solving group decision-making fuzzy AHP problems
Behnam Malakooti and Jumah E. Al-alwani	2003	Extremist vs. centrist decision behavior: quasi-convex utility functions for interactive multi-objective linear programming problems
L. Douglas Smith, Robert M. Nauss, Robert J. Banis and Ronald Beck	2023	Staffing geographically distributed service facilities with itinerant personnel
Sheng-Pen Wang	2043	An inventory replenishment policy for deteriorating items with shortages and partial backlogging
B.W. Conolly, P.R. Parthasarathy and N. Selvaraju	2053	Double-ended queues with impatience
Sakib A. Mondal	2073	Minimization of squared deviation of completion times about a common due date
T.C.E. Cheng and Mikhail Y. Kovalyov	2087	An unconstrained optimization problem is NP-hard given an oracle representation of its objective function: a technical note